

ABSTRACT OF THE DISCLOSURE

A method and apparatus for storing and updating information in a multicast system is represented by a tree data structure. The method and apparatus defines and populates a set of keys for each node in the tree. The number and content of the set of keys may vary depending on whether a node is an internal node or a leaf node. The method and apparatus can use these keys to update information in some leaves while excluding the information from other leaves. The method and apparatus can analyze the system to determine a minimum number of messages that need to be sent in order to update the information stored in leaves. The method and apparatus then sends the minimum number of messages throughout the system where each message can only be read by a particular subset set of the leaves that have the correct key to read that particular message.